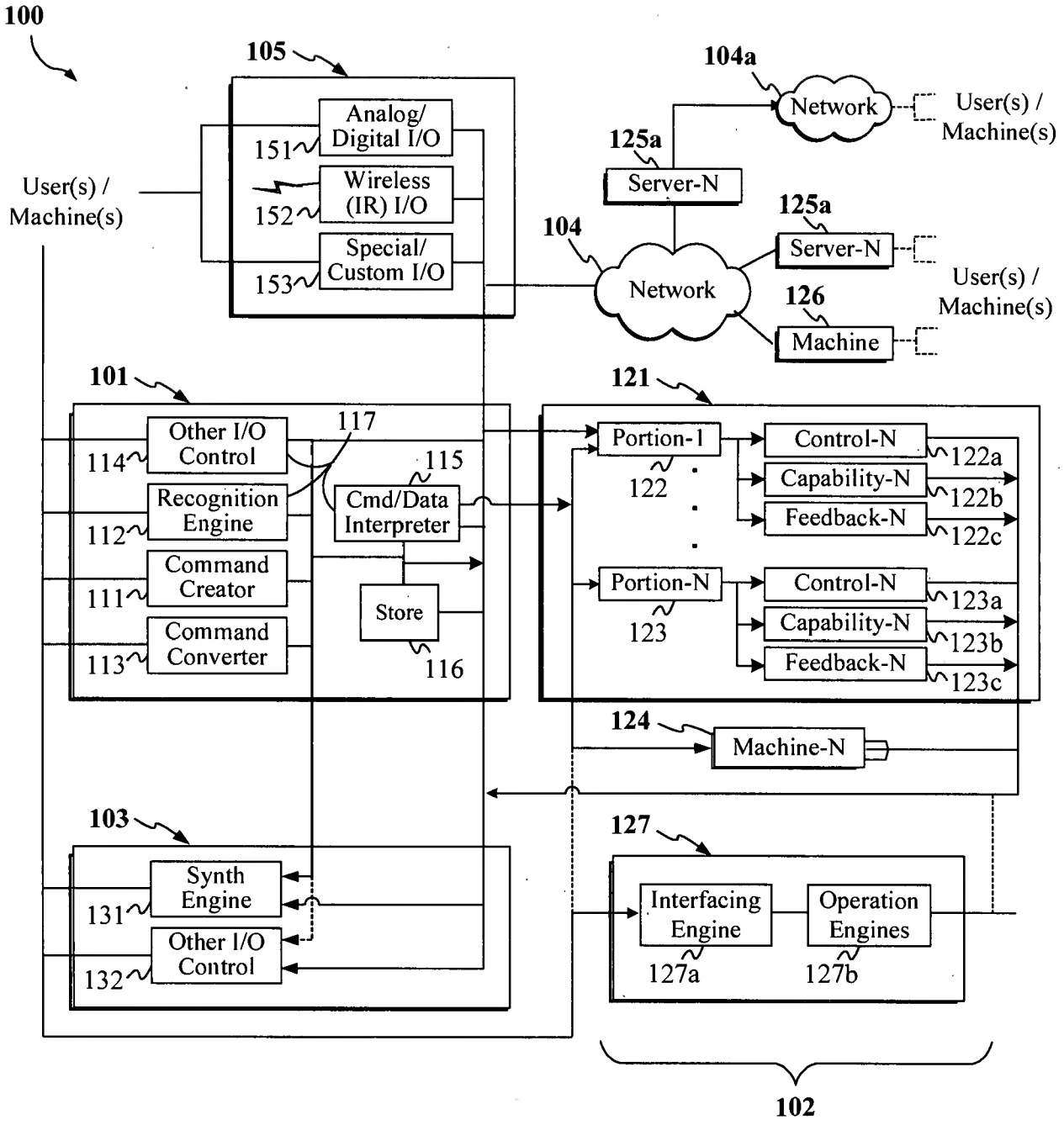

100
105
Analog/ Digital I/O
151
Wireless (IR) I/O
152
Special/ Custom I/O
153
User(s) / Machine(s)
104a
Network
User(s) / Machine(s)
125a
Server-N
104
Network
125a
Server-N
User(s) / Machine(s)
126
Machine
101
Other I/O Control
114
Recognition Engine
112
Command Creator
111
Command Converter
113
117
115
Cmd/Data Interpreter
Store
116
121
Portion-1
122
Control-N
Capability-N
Feedback-N
122a
122b
122c
Portion-N
123
Control-N
Capability-N
Feedback-N
123a
123b
123c
124
Machine-N
103
Synth Engine
131
Other I/O Control
132
127
Interfacing Engine
127a
Operation Engines
127b
102

FIG. 1

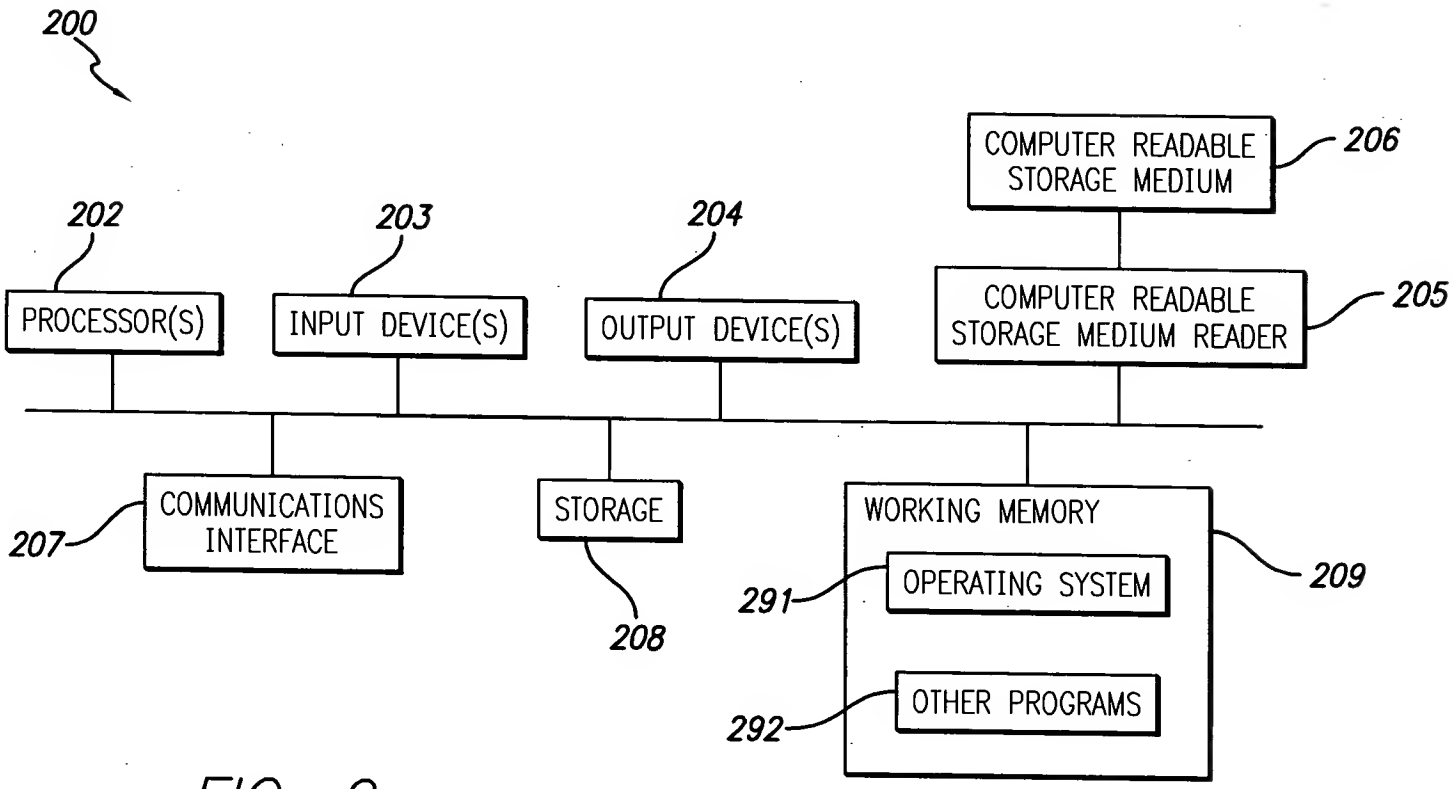

200
COMPUTER READABLE STORAGE MEDIUM
206
202
203
204
PROCESSOR(S)
INPUT DEVICE(S)
OUTPUT DEVICE(S)
COMPUTER READABLE STORAGE MEDIUM READER
205
207
COMMUNICATIONS INTERFACE
STORAGE
208
WORKING MEMORY
209
291
OPERATING SYSTEM
292
OTHER PROGRAMS

FIG. 2

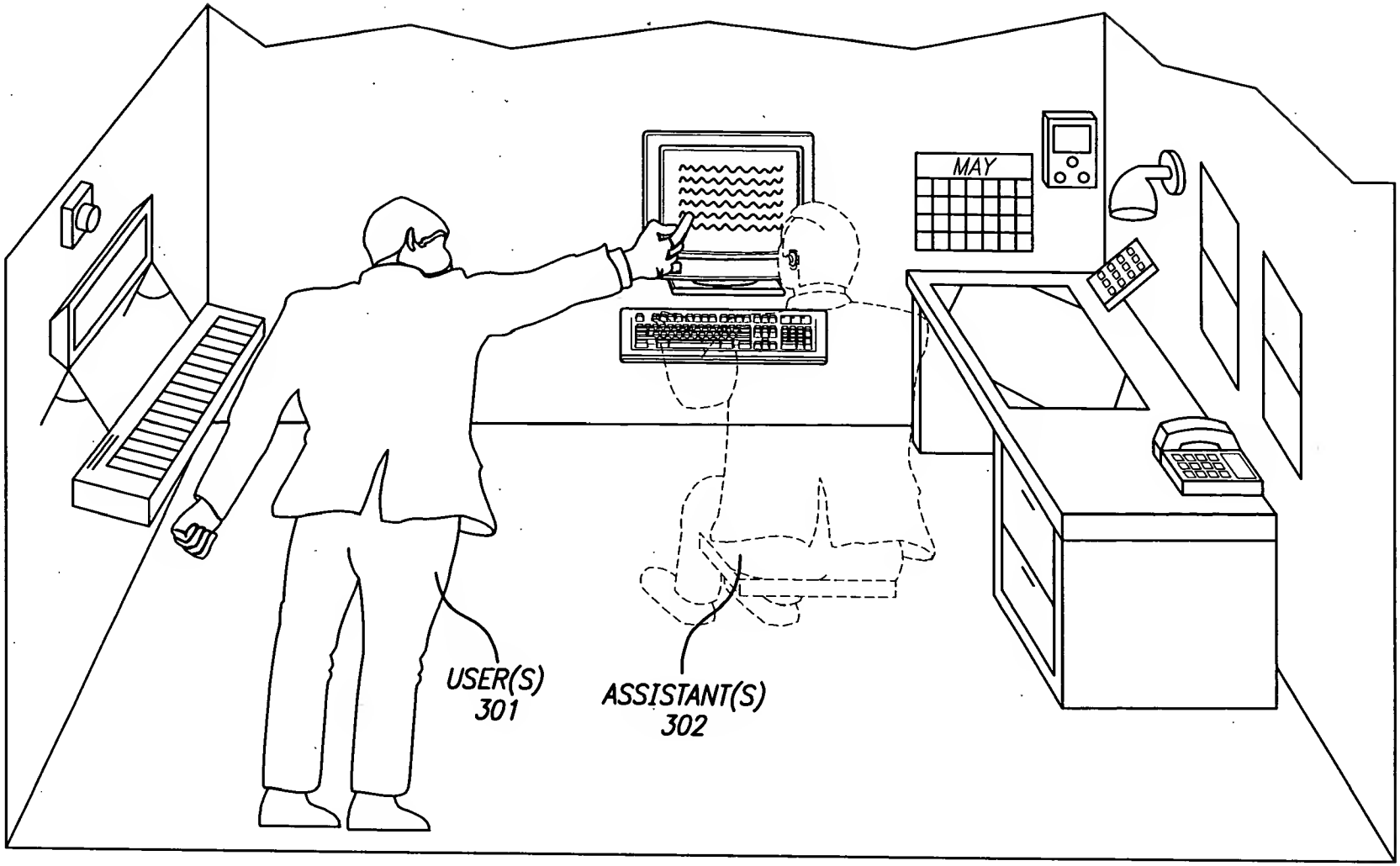


FIG. 3a

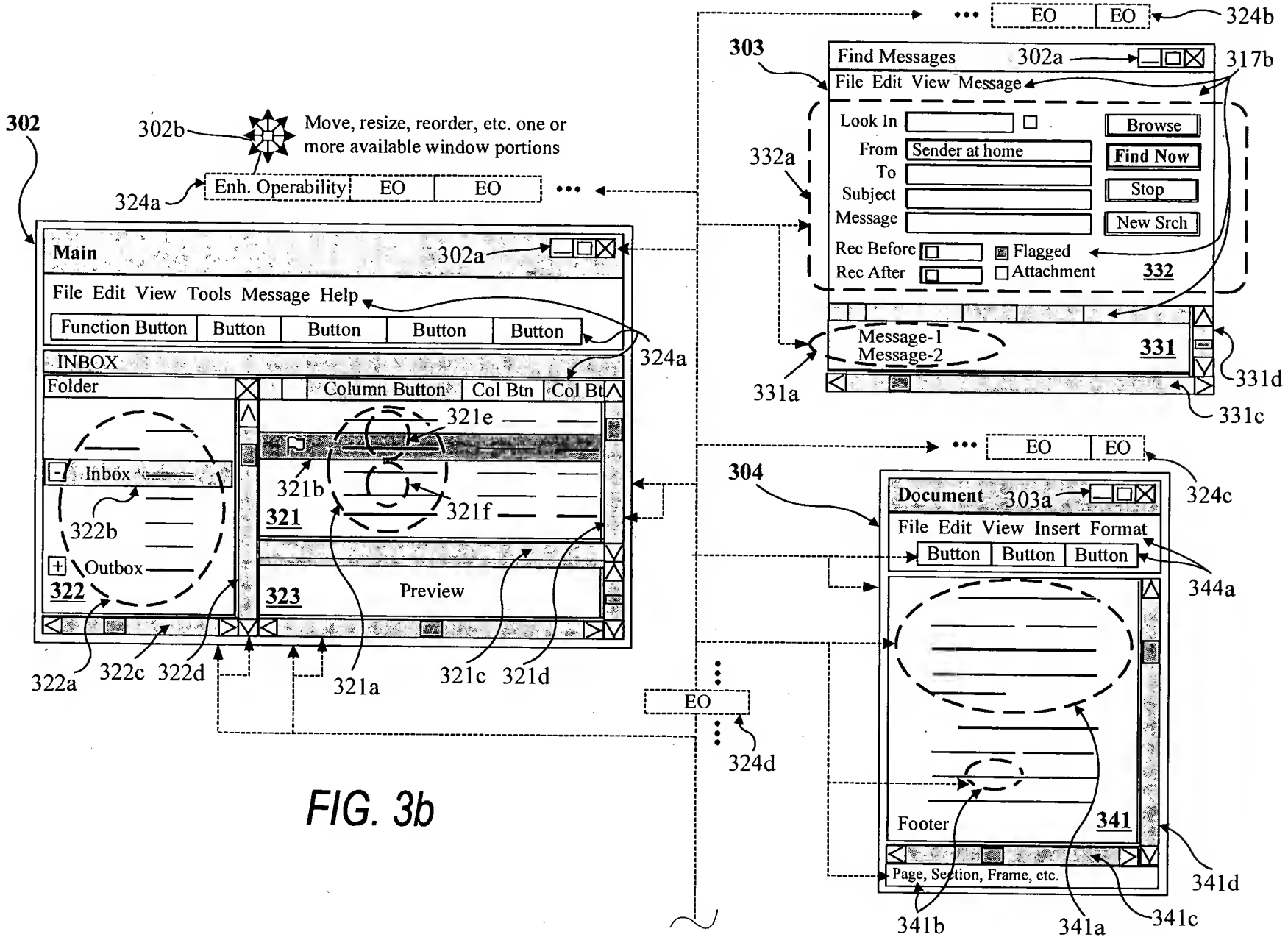

302
302b
Move, resize, reorder, etc. one or more available window portions
324a
Enh. Operability
EO
EO
Main
302a
File Edit View Tools Message Help
Function Button
Button
Button
Button
Button
INBOX
Folder
Column Button
Col Btn
Col Bt
Inbox
Outbox
322
322b
321
321e
321b
321f
323
Preview
322a
322c
322d
321a
321c
321d
303
Find Messages
302a
317b
File Edit View Message
Look In
Browse
From
Sender at home
Find Now
To
Subject
Stop
Message
New Srch
Rec Before
Flagged
Rec After
Attachment
332
332a
Message-1
Message-2
331
331a
331d
331c
324b
304
Document
303a
File Edit View Insert Format
Button
Button
Button
344a
324c
Footer
341
Page, Section, Frame, etc.
341b
341a
341c
341d
EO
324d

FIG. 3b

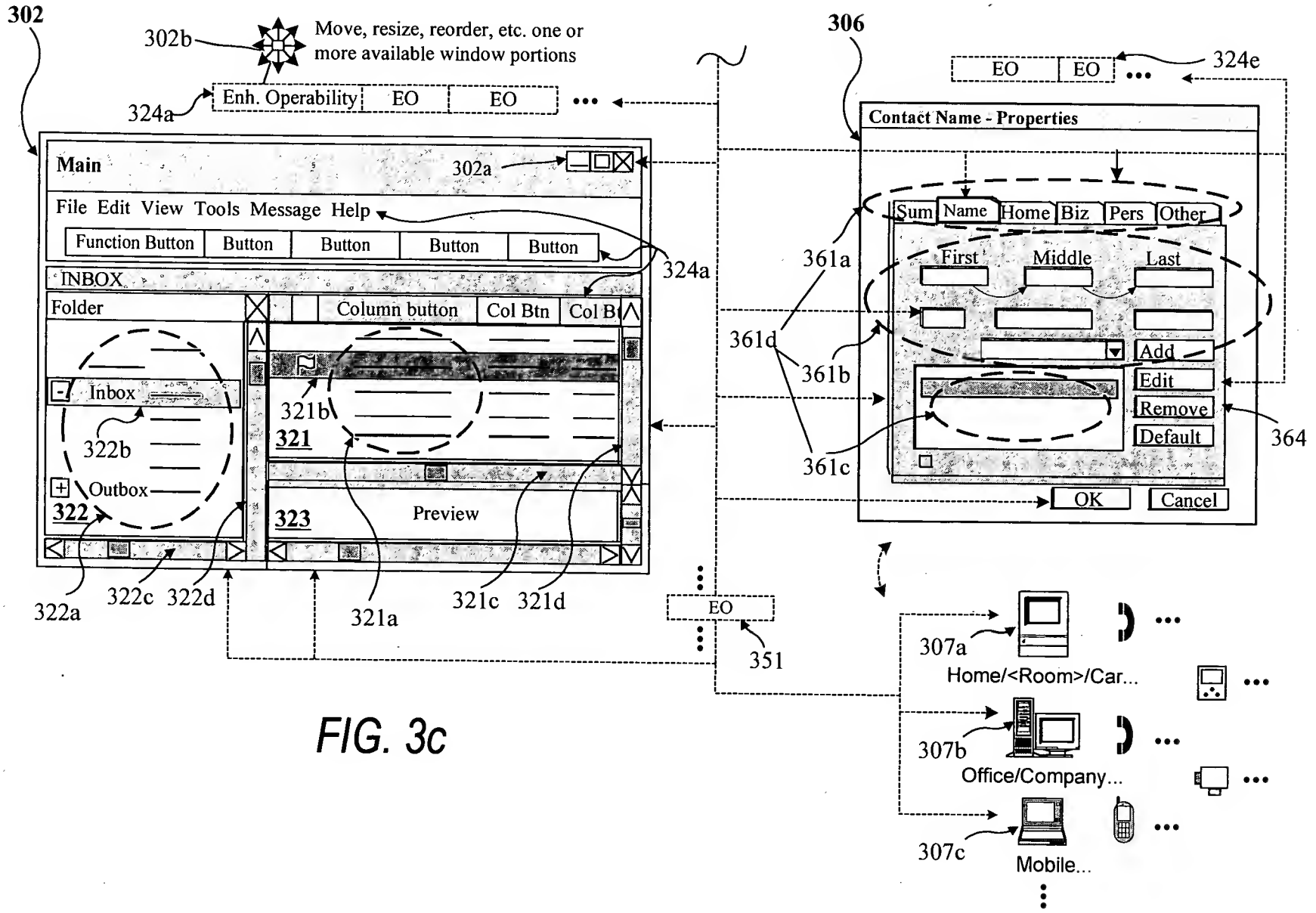

302
302b
Move, resize, reorder, etc. one or more available window portions
324a
Enh. Operability
EO
EO
Main
302a
File Edit View Tools Message Help
Function Button
Button
Button
Button
Button
INBOX
Folder
Column button
Col Btn
Inbox
322b
321b
321
Outbox
322
323
Preview
322a
322c
322d
321a
321c
321d
324a
306
EO
EO
324e
Contact Name - Properties
Sum
Name
Home
Biz
Pers
Other
First
Middle
Last
Add
Edit
Remove
Default
OK
Cancel
361a
361d
361b
361c
364
EO
351
307a
Home/<Room>/Car...
307b
Office/Company...
307c
Mobile...

FIG. 3c

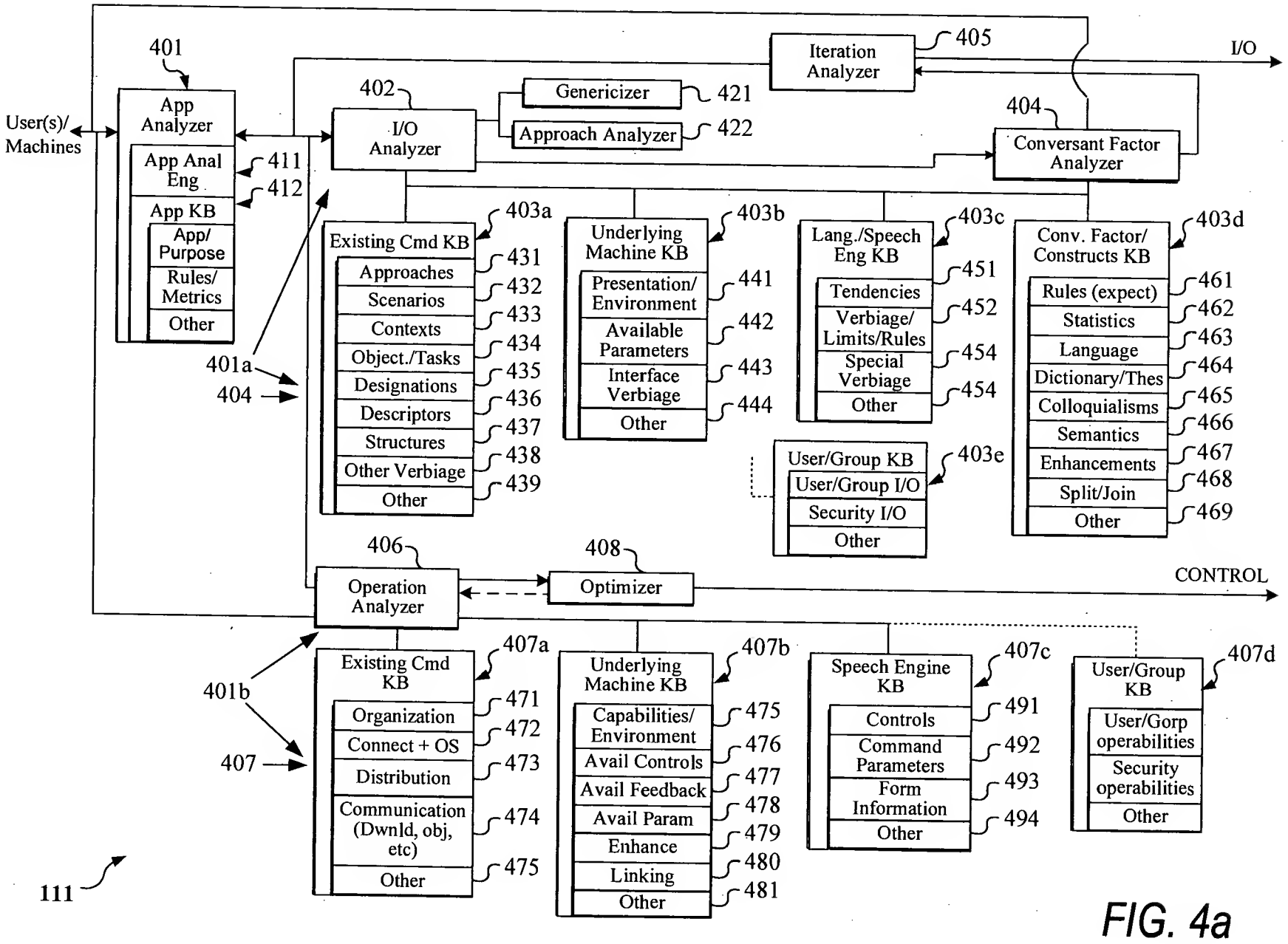

User(s)/ Machines
401
App Analyzer
App Anal Eng
411
App KB
412
App/ Purpose
Rules/ Metrics
Other
401a
404
402
I/O Analyzer
Genericizer
421
Approach Analyzer
422
Iteration Analyzer
405
I/O
404
Conversant Factor Analyzer
403a
Existing Cmd KB
Approaches
431
Scenarios
432
Contexts
433
Object./Tasks
434
Designations
435
Descriptors
436
Structures
437
Other Verbiage
438
Other
439
403b
Underlying Machine KB
Presentation/ Environment
441
Available Parameters
442
Interface Verbiage
443
Other
444
403c
Lang./Speech Eng KB
Tendencies
451
Verbiage/ Limits/Rules
452
Special Verbiage
454
Other
454
403d
Conv. Factor/ Constructs KB
Rules (expect)
461
Statistics
462
Language
463
Dictionary/Thes
464
Colloquialisms
465
Semantics
466
Enhancements
467
Split/Join
468
Other
469
403e
User/Group KB
User/Group I/O
Security I/O
Other
406
Operation Analyzer
408
Optimizer
CONTROL
401b
407
407a
Existing Cmd KB
Organization
471
Connect + OS
472
Distribution
473
Communication (Dwnld, obj, etc)
474
Other
475
407b
Underlying Machine KB
Capabilities/ Environment
475
Avail Controls
476
Avail Feedback
477
Avail Param
478
Enhance
479
Linking
480
Other
481
407c
Speech Engine KB
Controls
491
Command Parameters
492
Form Information
493
Other
494
407d
User/Group KB
User/Gorp operabilities
Security operabilities
Other
111

FIG. 4a

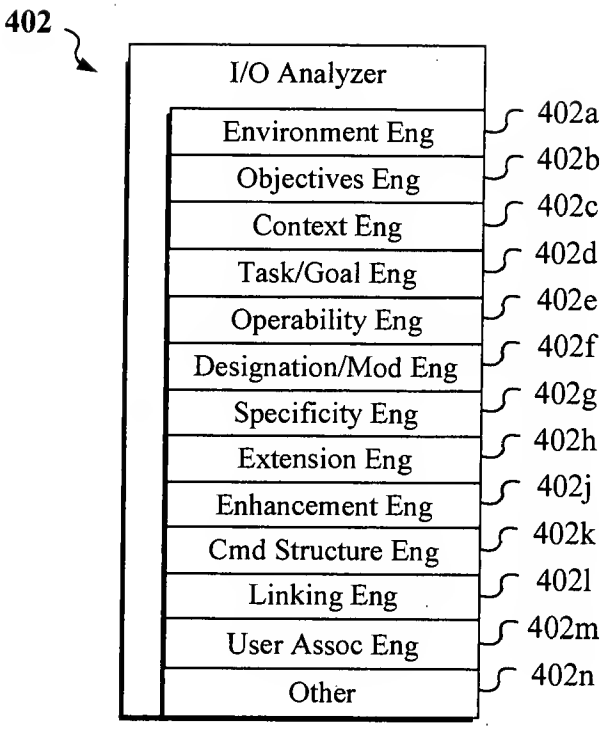

402
I/O Analyzer
Environment Eng
Objectives Eng
Context Eng
Task/Goal Eng
Operability Eng
Designation/Mod Eng
Specificity Eng
Extension Eng
Enhancement Eng
Cmd Structure Eng
Linking Eng
User Assoc Eng
Other
402a
402b
402c
402d
402e
402f
402g
402h
402j
402k
402l
402m
402n

FIG. 4b

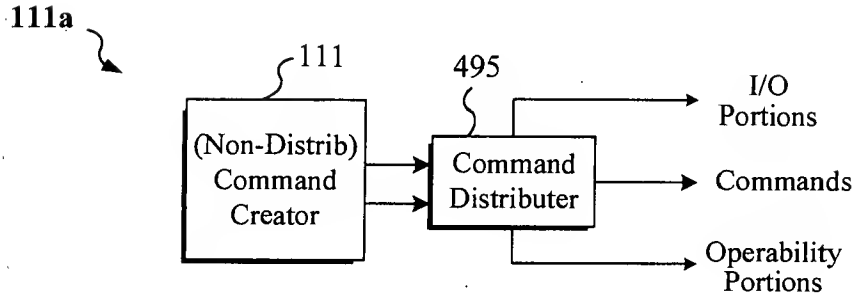

111a
111
495
(Non-Distrib) Command Creator
Command Distributer
I/O Portions
Commands
Operability Portions

FIG. 4c

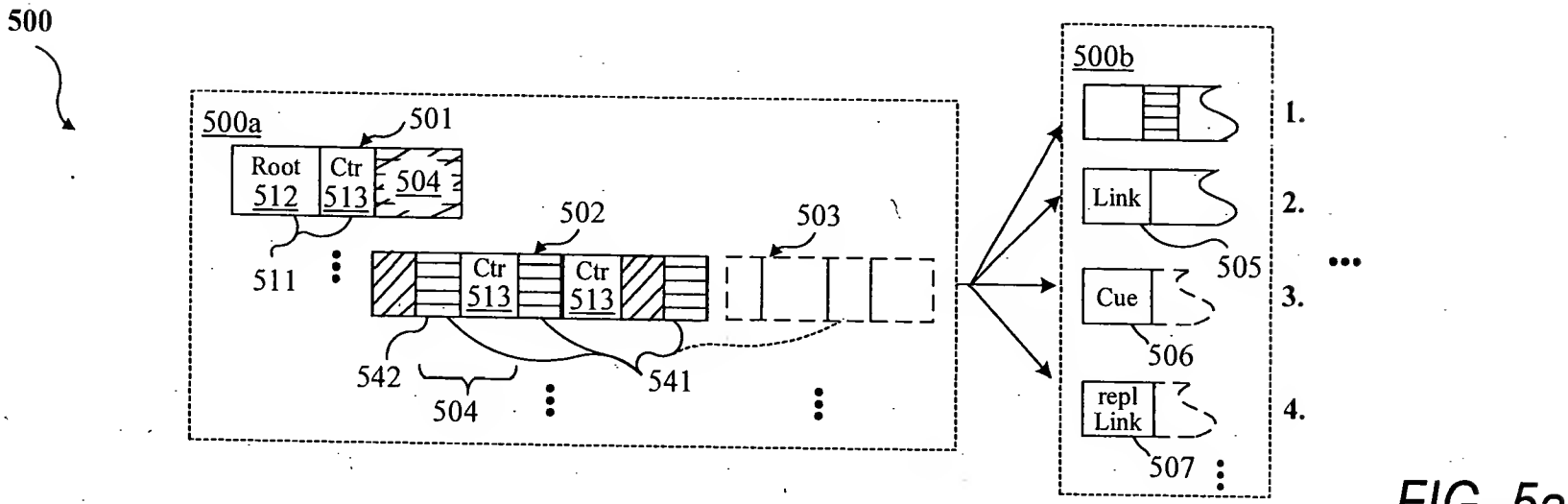

500
500a
501
Root
512
Ctr
513
504
511
502
503
Ctr
513
Ctr
513
542
504
541
500b
1.
Link
505
2.
Cue
506
3.
repl
Link
507
4.

FIG. 5a

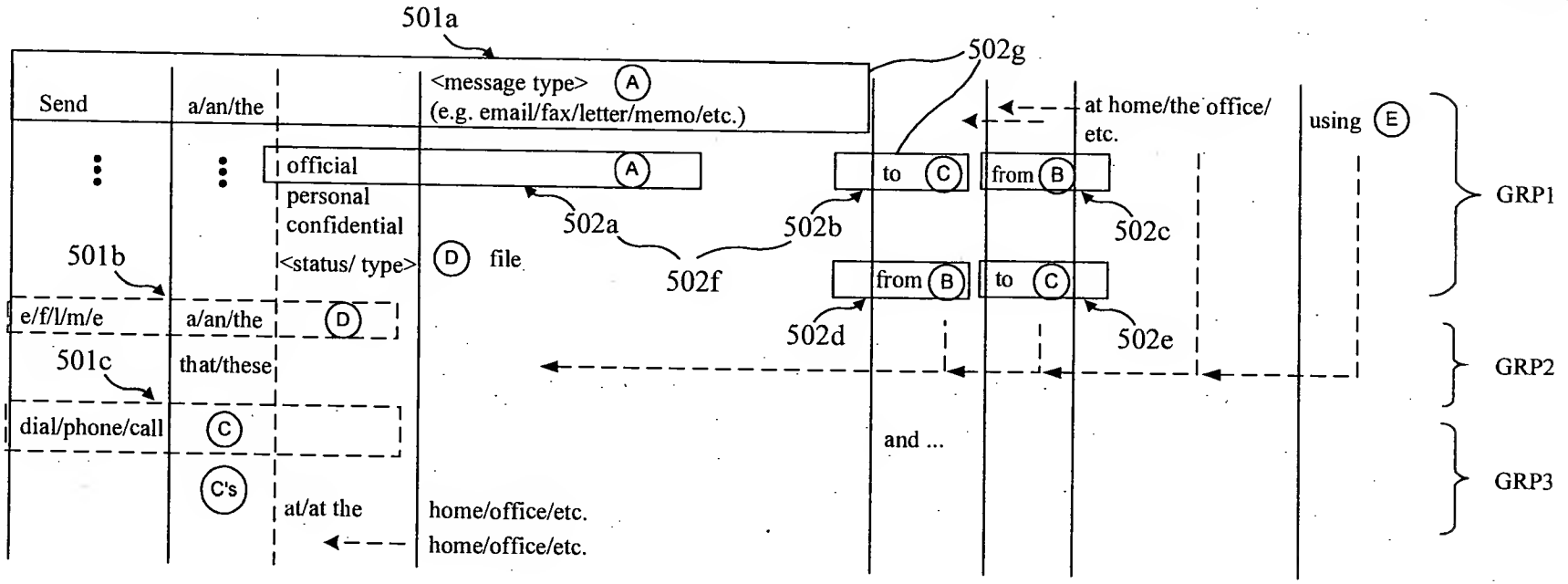

501a
502g
Send
a/an/the
<message type> A
(e.g. email/fax/letter/memo/etc.)
at home/the office/
etc.
using E
official
personal
confidential
A
to C
from B
502a
502b
502c
501b
<status/ type>
D file
502f
from B
to C
e/f/l/m/e
a/an/the
D
502d
502e
501c
that/these
GRP1
GRP2
dial/phone/call
C
and ...
GRP3
C's
at/at the
home/office/etc.
home/office/etc.

FIG. 5b

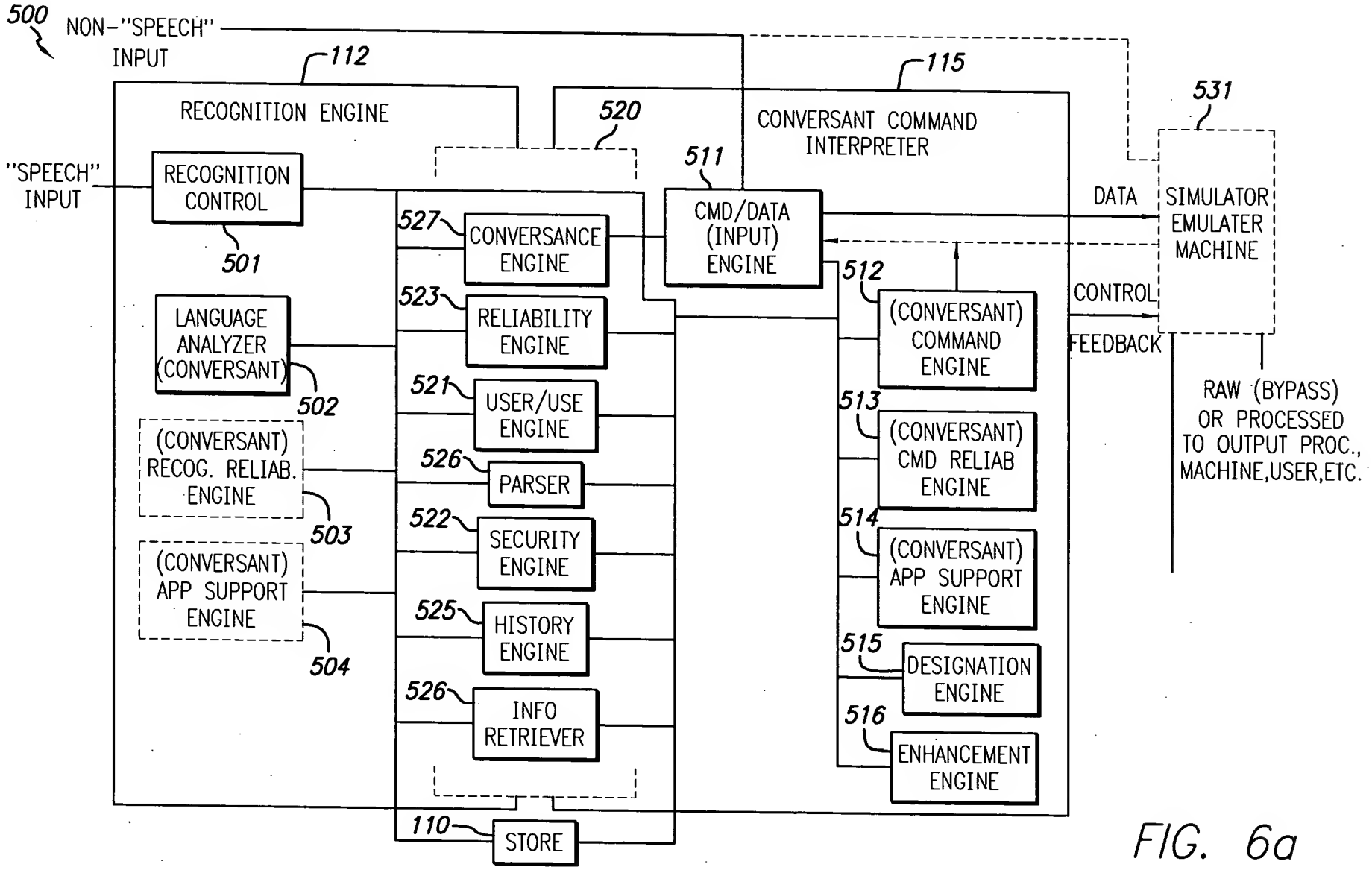

500
NON-"SPEECH" INPUT
112
RECOGNITION ENGINE
520
115
CONVERSANT COMMAND INTERPRETER
531
"SPEECH" INPUT
RECOGNITION CONTROL
501
511
CMD/DATA (INPUT) ENGINE
DATA
SIMULATOR EMULATER MACHINE
527
CONVERSANCE ENGINE
523
RELIABILITY ENGINE
521
USER/USE ENGINE
526
PARSER
522
SECURITY ENGINE
525
HISTORY ENGINE
526
INFO RETRIEVER
110
STORE
LANGUAGE ANALYZER (CONVERSANT)
502
(CONVERSANT) RECOG. RELIAB. ENGINE
503
(CONVERSANT) APP SUPPORT ENGINE
504
512
(CONVERSANT) COMMAND ENGINE
513
(CONVERSANT) CMD RELIAB ENGINE
514
(CONVERSANT) APP SUPPORT ENGINE
515
DESIGNATION ENGINE
516
ENHANCEMENT ENGINE
CONTROL
FEEDBACK
RAW (BYPASS) OR PROCESSED TO OUTPUT PROC., MACHINE,USER,ETC.

FIG. 6a

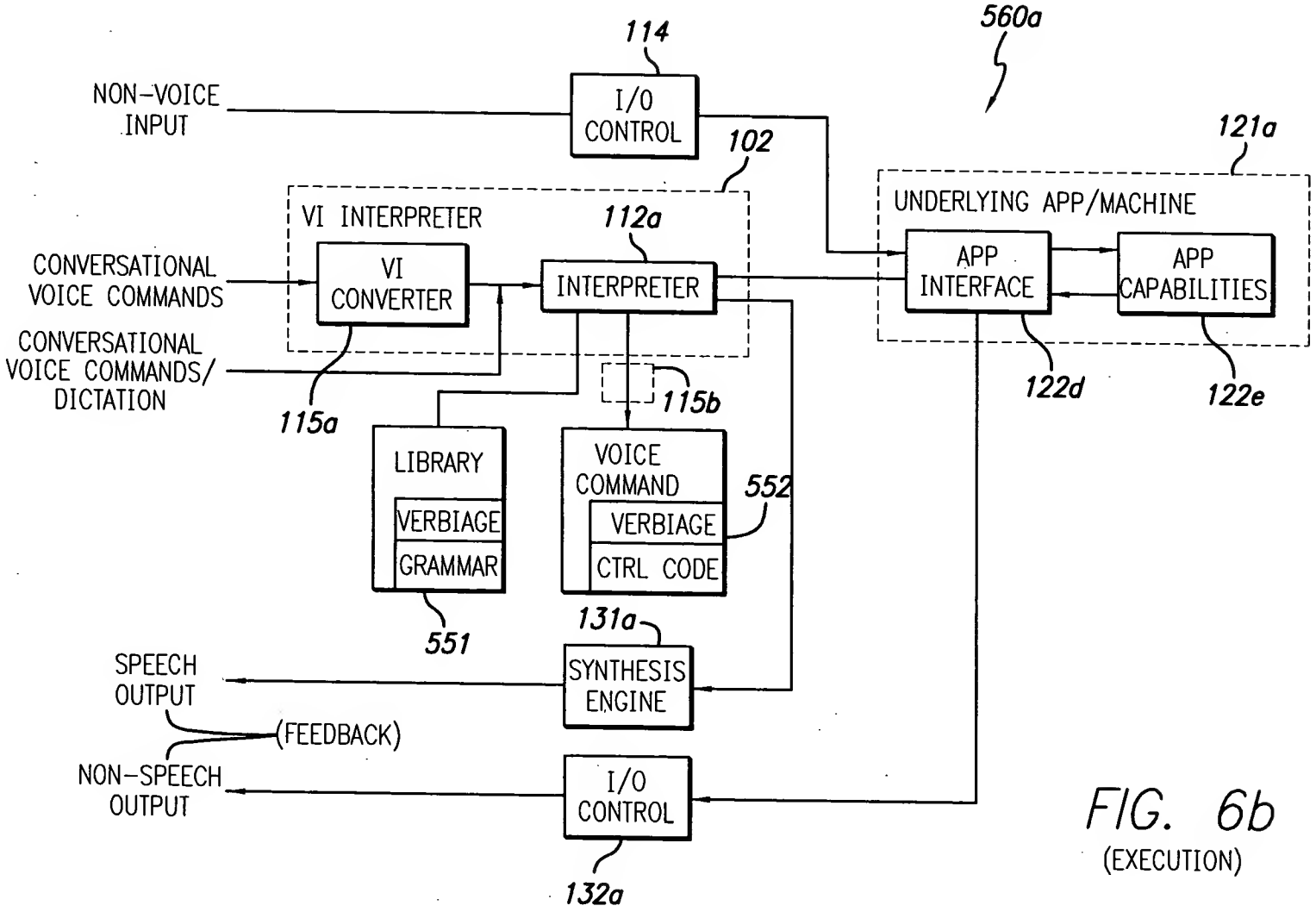


FIG. 6b
(EXECUTION)

FIG. 7a

INPUT ENGINE

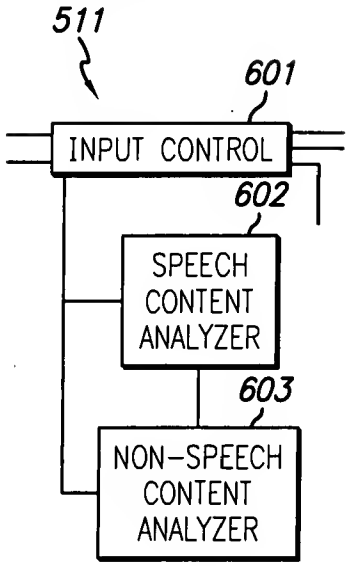


FIG. 7b

COMMAND ENGINE

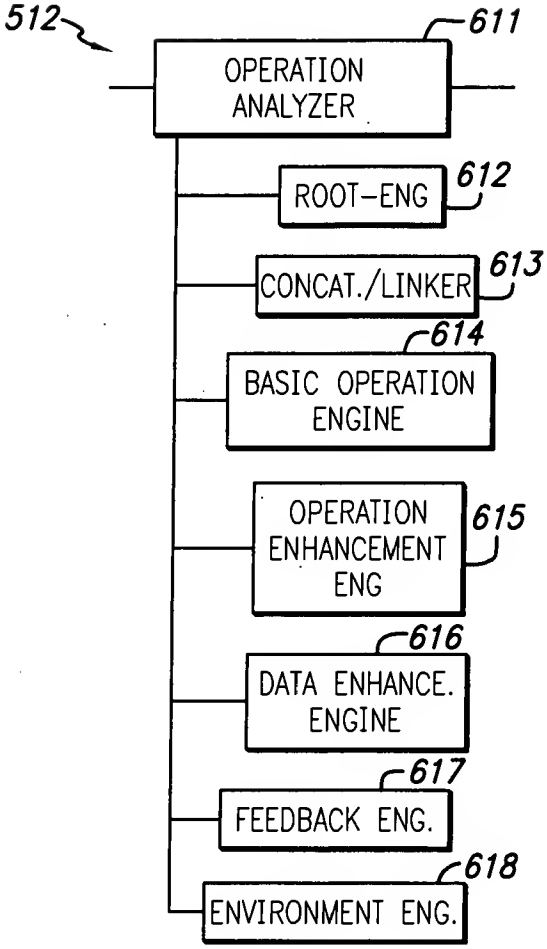


FIG. 7c

APPLICATION SUPPORT

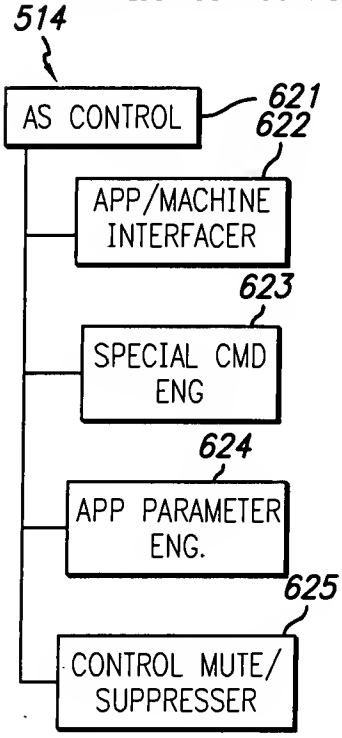


FIG. 7d

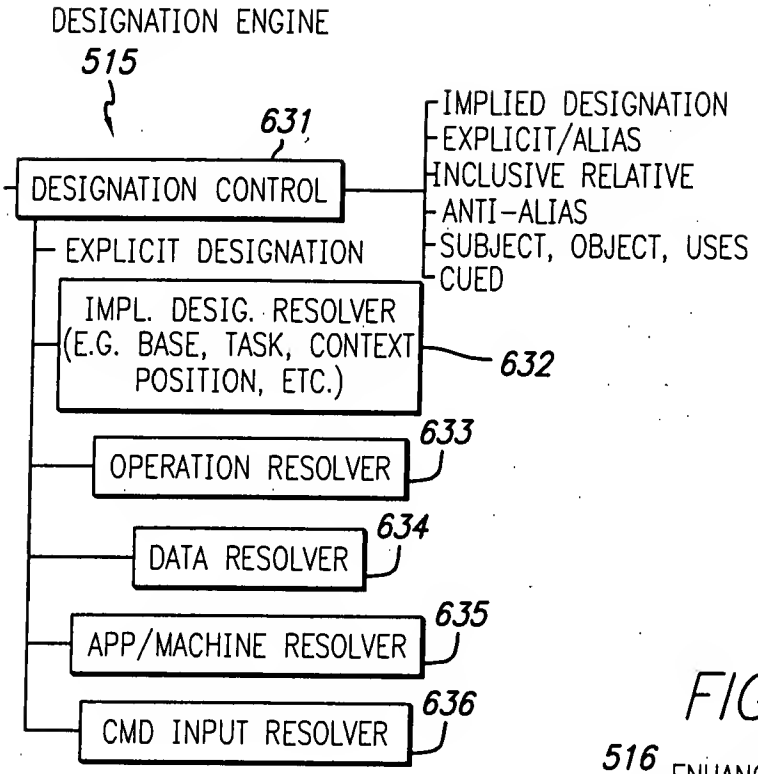
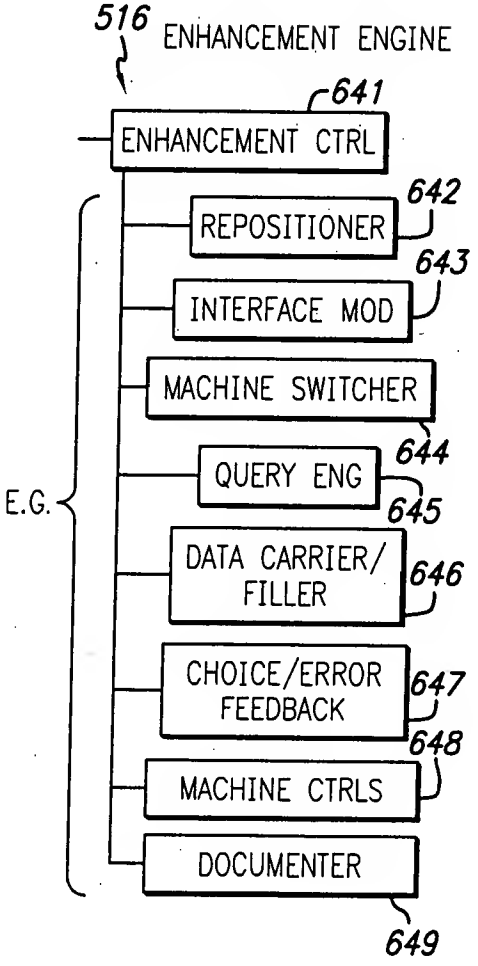

DESIGNATION ENGINE
515
631
DESIGNATION CONTROL
IMPLIED DESIGNATION
EXPLICIT/ALIAS
INCLUSIVE RELATIVE
ANTI-ALIAS
SUBJECT, OBJECT, USES
CUED
EXPLICIT DESIGNATION
IMPL. DESIG. RESOLVER (E.G. BASE, TASK, CONTEXT POSITION, ETC.)
632
OPERATION RESOLVER
633
DATA RESOLVER
634
APP/MACHINE RESOLVER
635
CMD INPUT RESOLVER
636

FIG. 7e


516
ENHANCEMENT ENGINE
641
ENHANCEMENT CTRL
E.G.
642
REPOSITIONER
643
INTERFACE MOD
MACHINE SWITCHER
644
QUERY ENG
645
DATA CARRIER/ FILLER
646
CHOICE/ERROR FEEDBACK
647
648
MACHINE CTRLS
DOCUMENTER
649

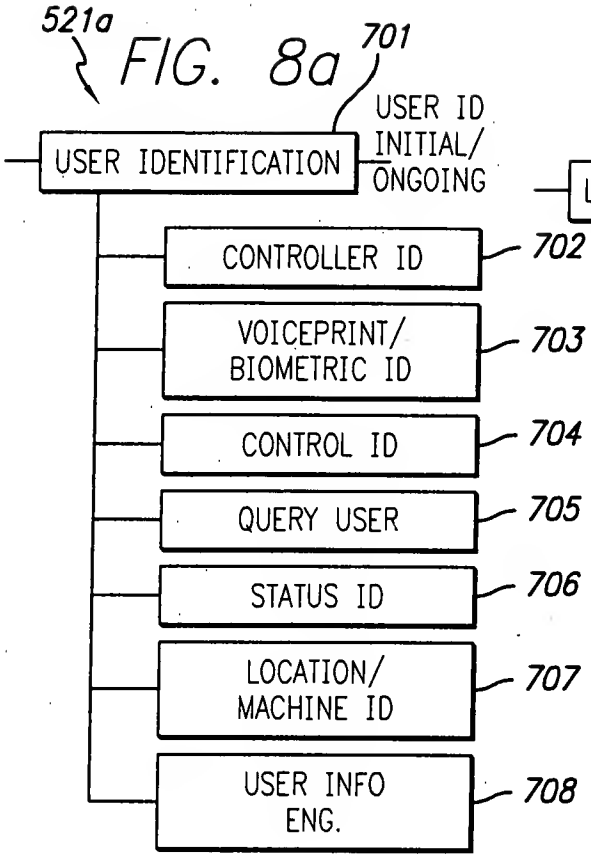


FIG. 8a

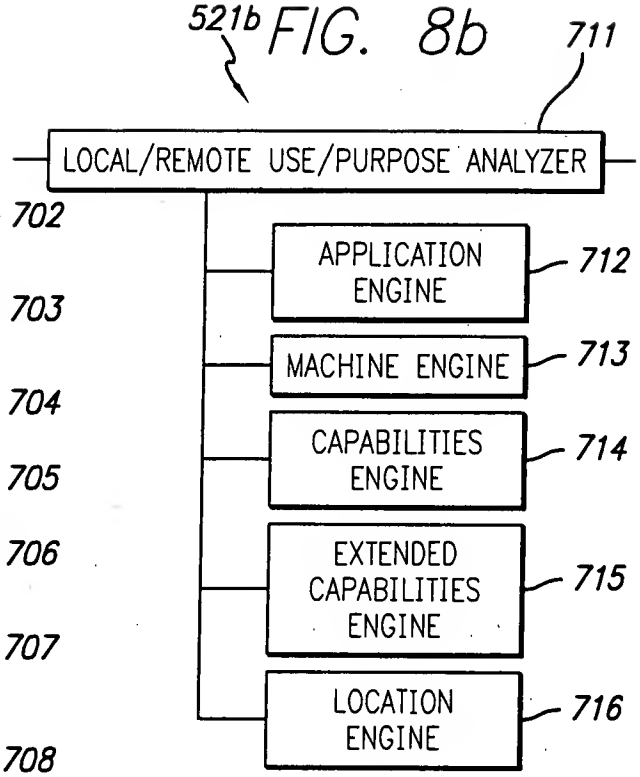


FIG. 8b

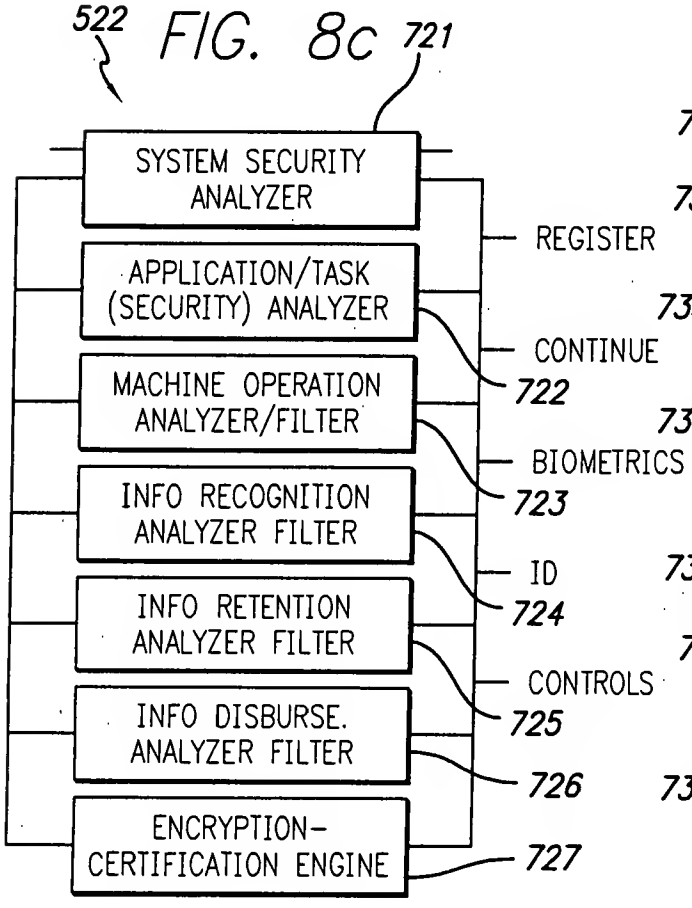


FIG. 8c

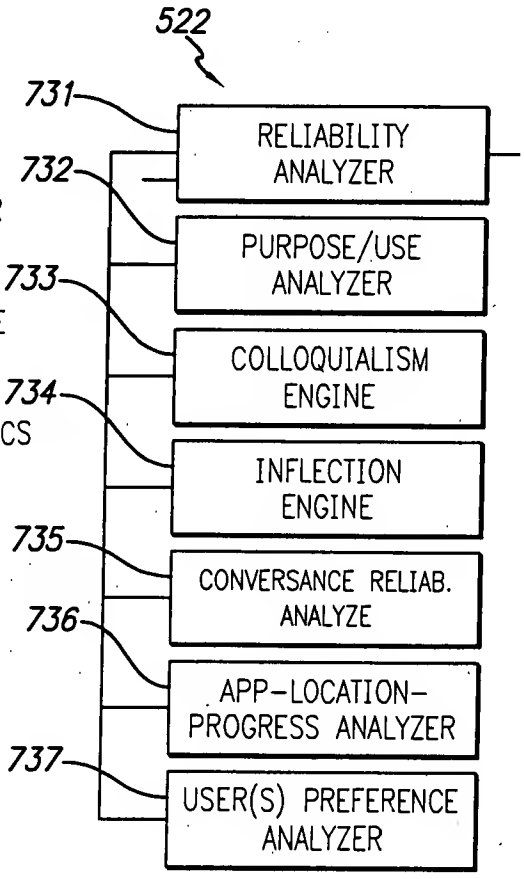


FIG. 8d

FIG. 8e

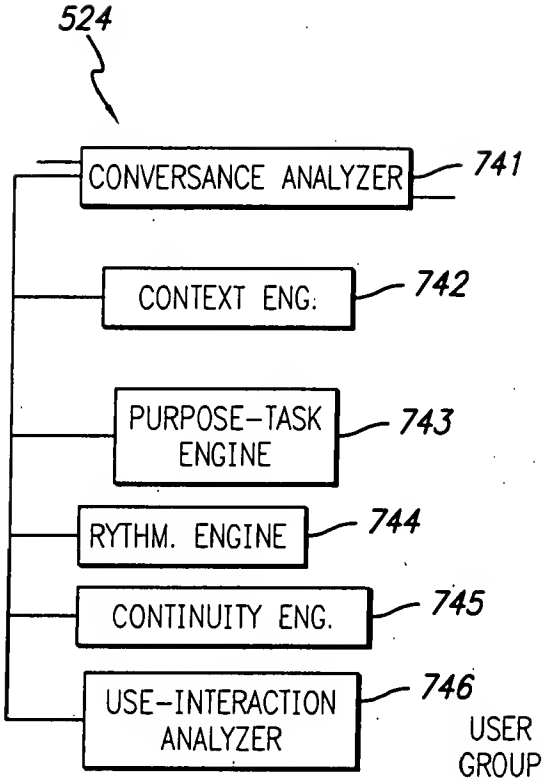


FIG. 8f

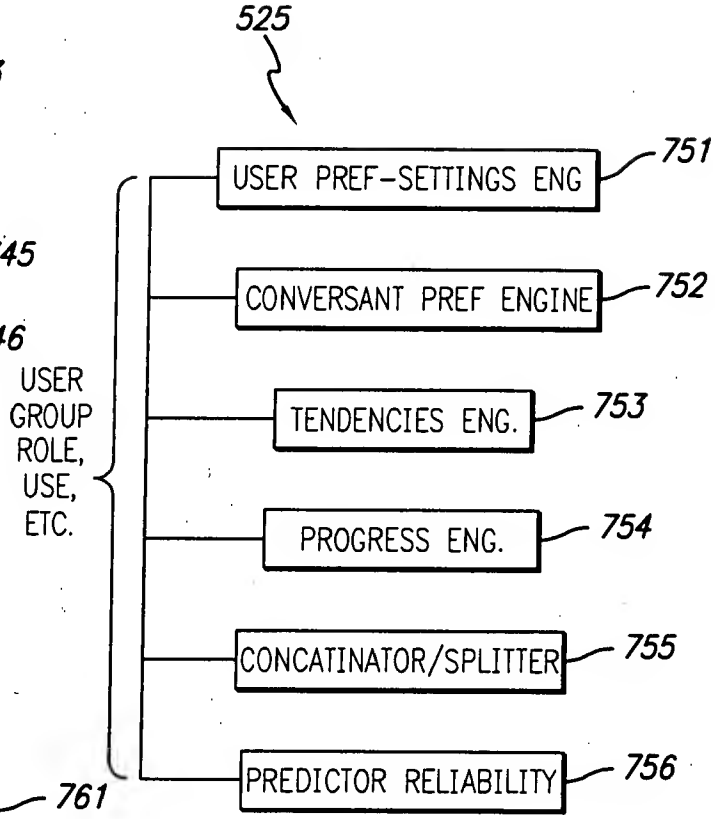


FIG. 8g

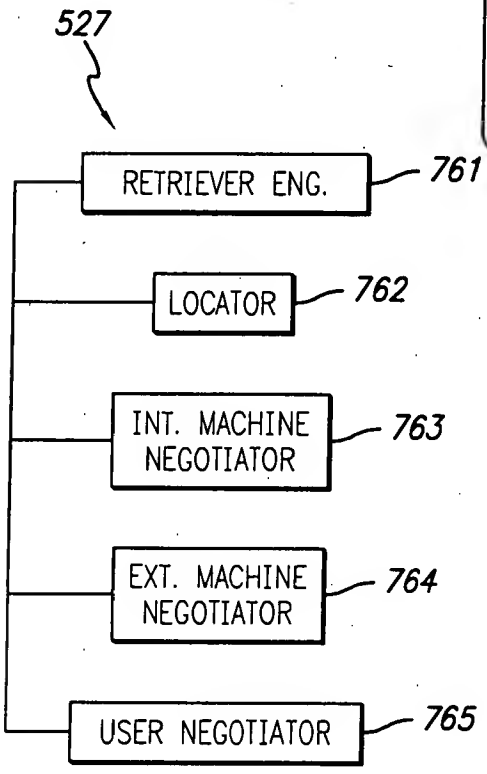


FIG. 6a

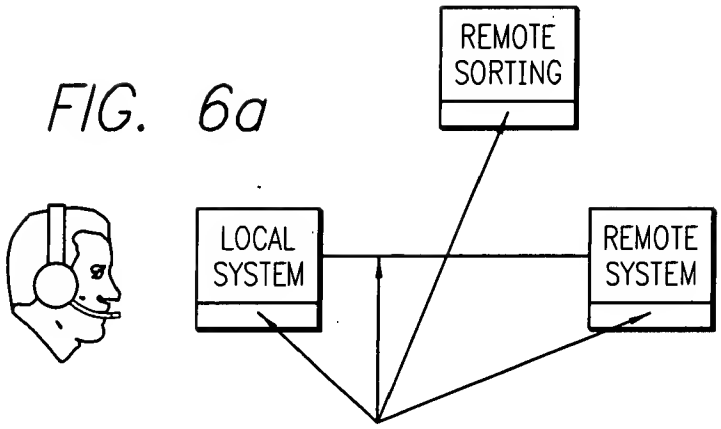
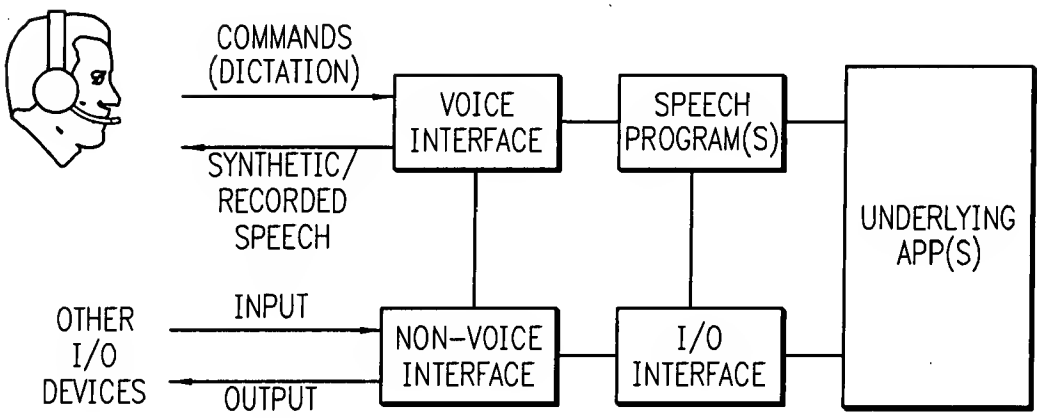


FIG. 6b



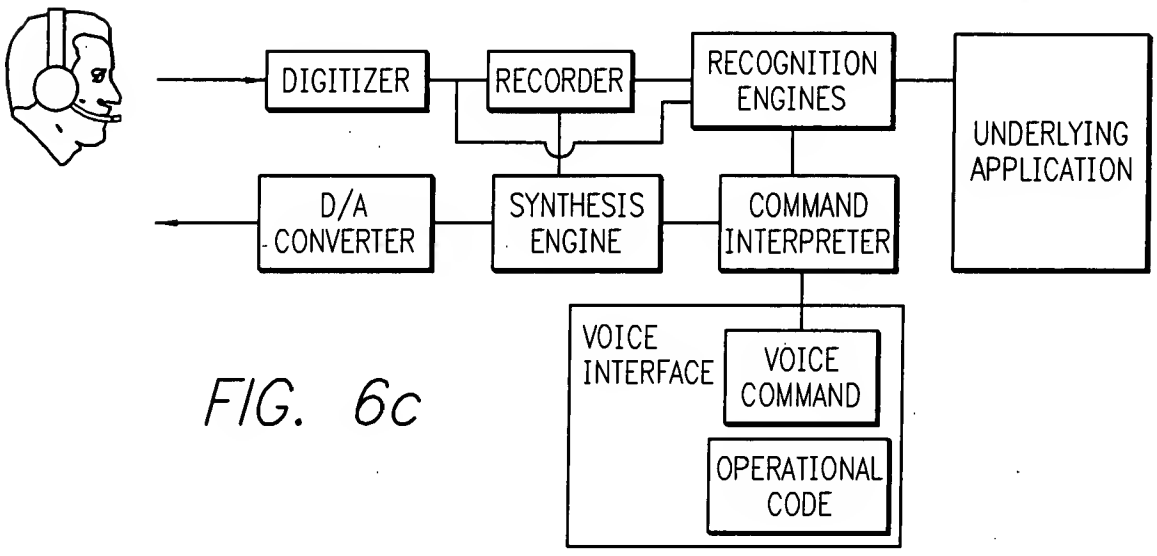


FIG. 6c

FIG. 6d

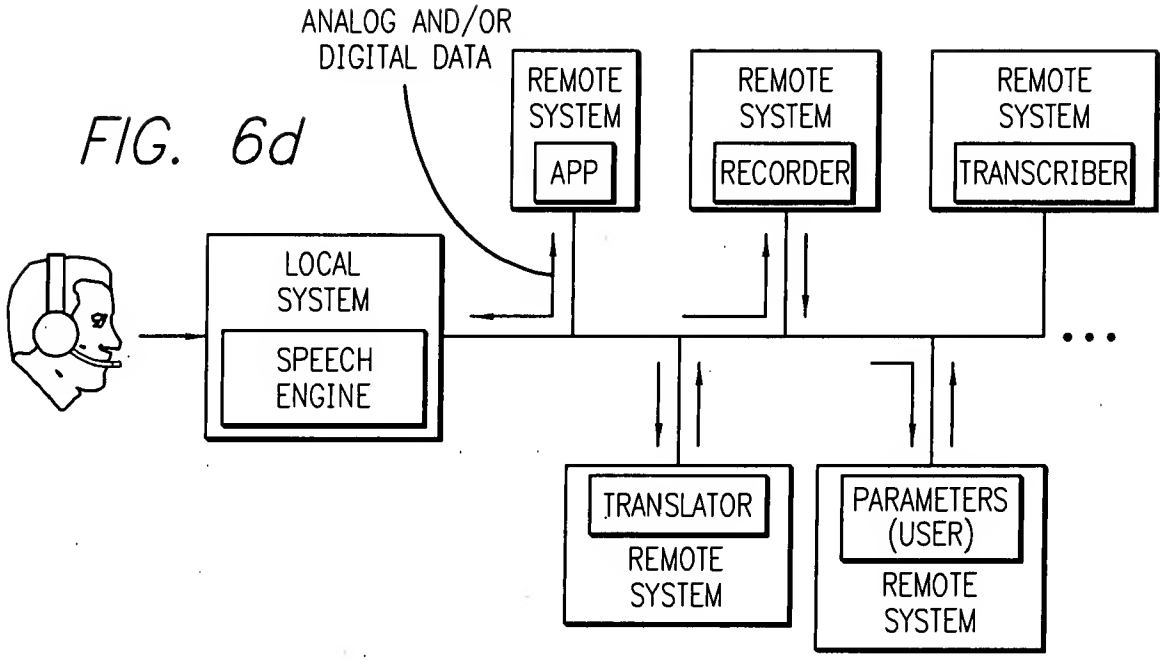

ANALOG AND/OR
DIGITAL DATA
REMOTE
SYSTEM
APP
REMOTE
SYSTEM
RECORDER
REMOTE
SYSTEM
TRANSCRIBER
LOCAL
SYSTEM
SPEECH
ENGINE
TRANSLATOR
REMOTE
SYSTEM
PARAMETERS
(USER)
REMOTE
SYSTEM

FIG. 6e

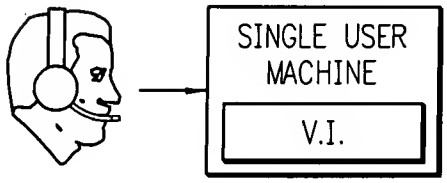

SINGLE USER
MACHINE
V.I.

FIG. 10–1

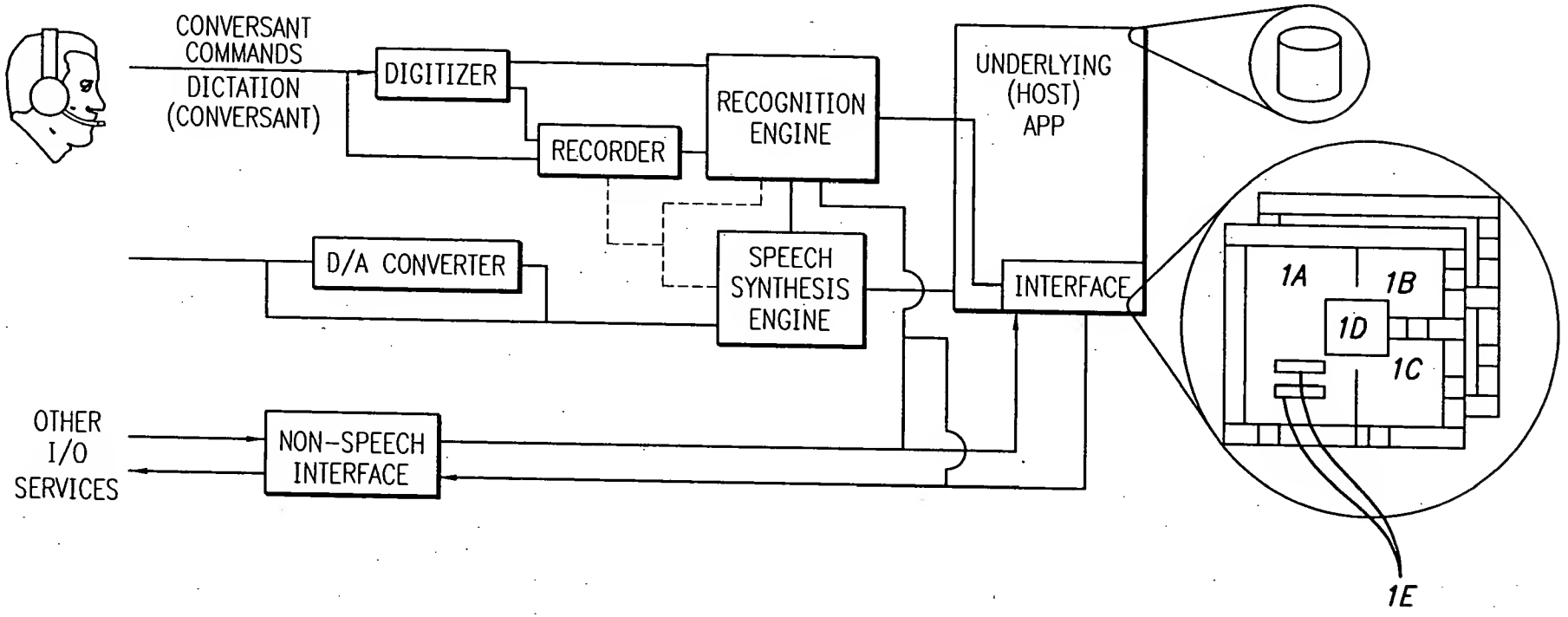
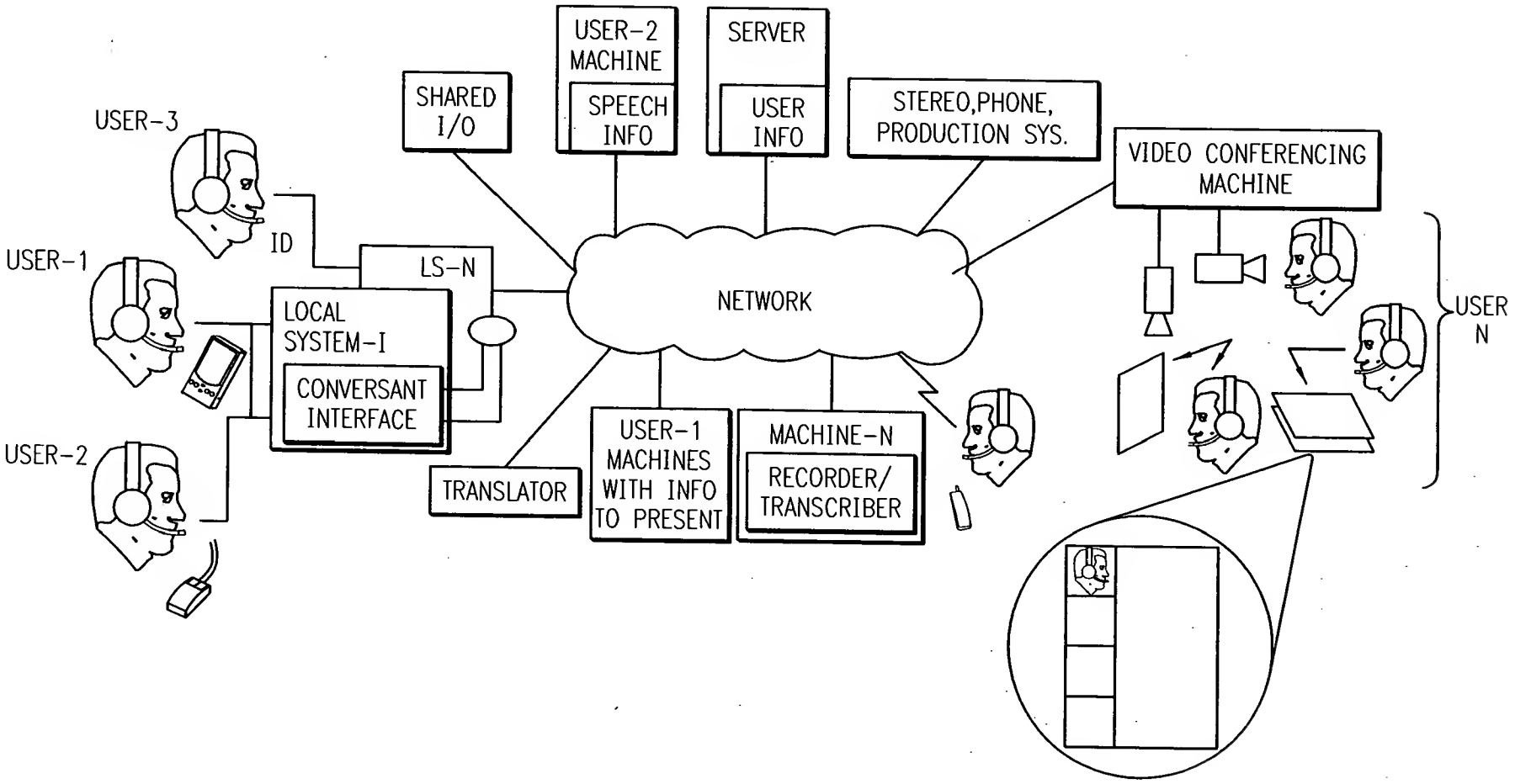

CONVERSANT COMMANDS
DICTATION (CONVERSANT)
DIGITIZER
RECORDER
RECOGNITION ENGINE
UNDERLYING (HOST) APP
D/A CONVERTER
SPEECH SYNTHESIS ENGINE
INTERFACE
OTHER I/O SERVICES
NON–SPEECH INTERFACE
1A
1B
1D
1C
1E

FIG. 10-2


USER-3
USER-1
USER-2
ID
LS-N
LOCAL SYSTEM-I
CONVERSANT INTERFACE
SHARED I/O
USER-2 MACHINE
SPEECH INFO
SERVER
USER INFO
STEREO,PHONE, PRODUCTION SYS.
NETWORK
VIDEO CONFERENCING MACHINE
USER N
TRANSLATOR
USER-1 MACHINES WITH INFO TO PRESENT
MACHINE-N
RECORDER/ TRANSCRIBER

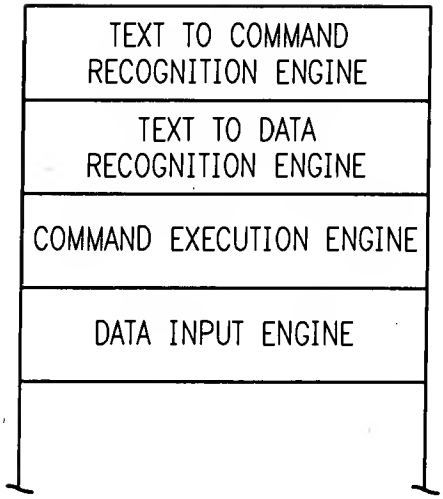

TEXT TO COMMAND RECOGNITION ENGINE
TEXT TO DATA RECOGNITION ENGINE
COMMAND EXECUTION ENGINE
DATA INPUT ENGINE

FIG. 8

FIG. 5

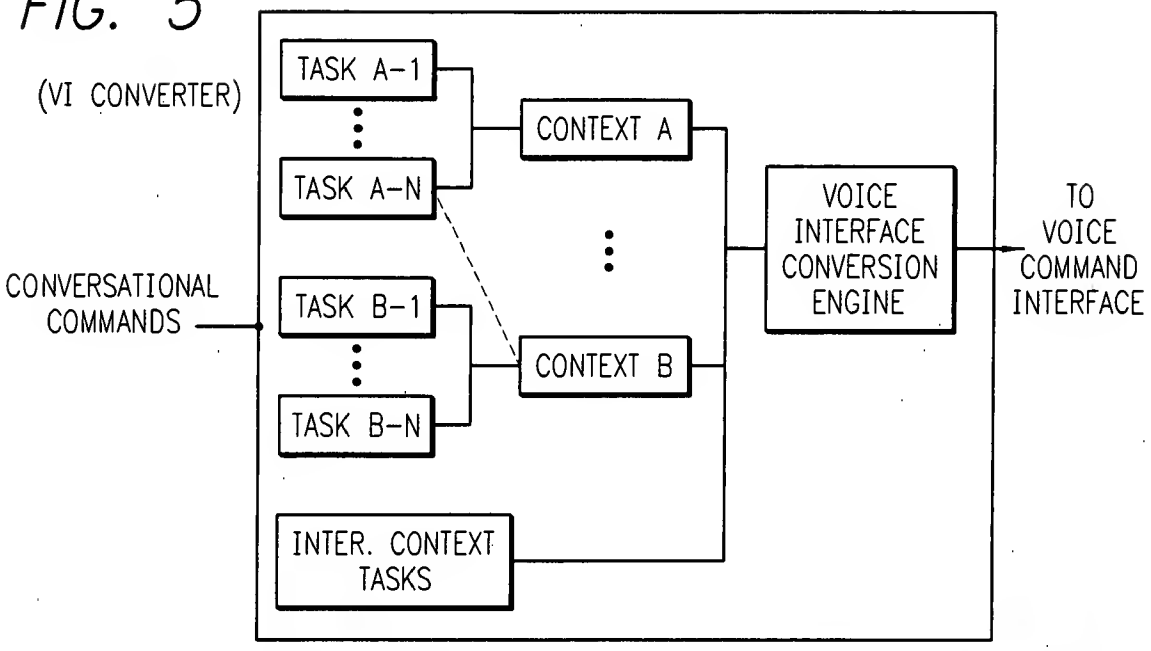


FIG. 10

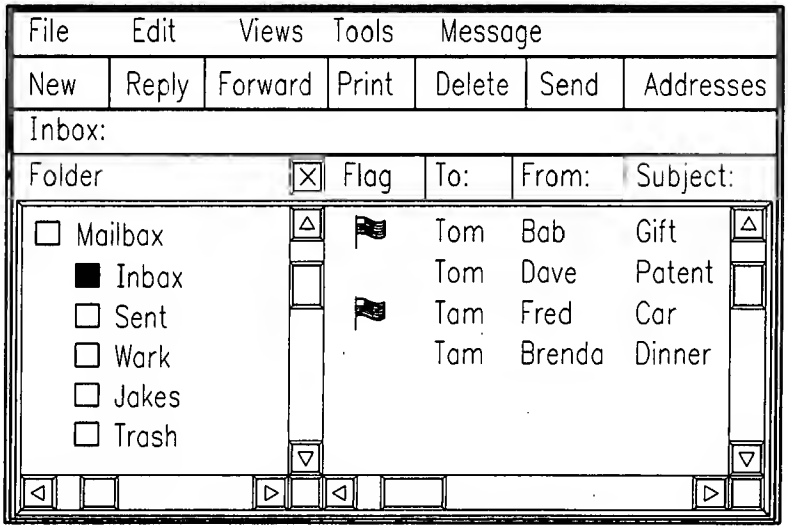
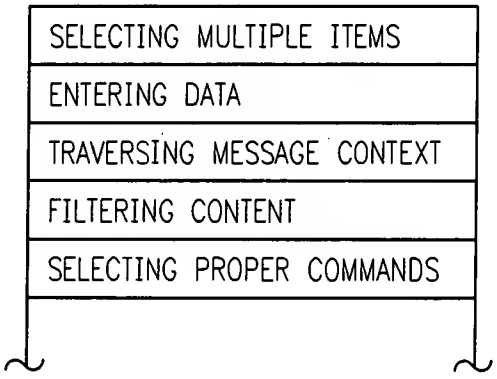


FIG. 11b



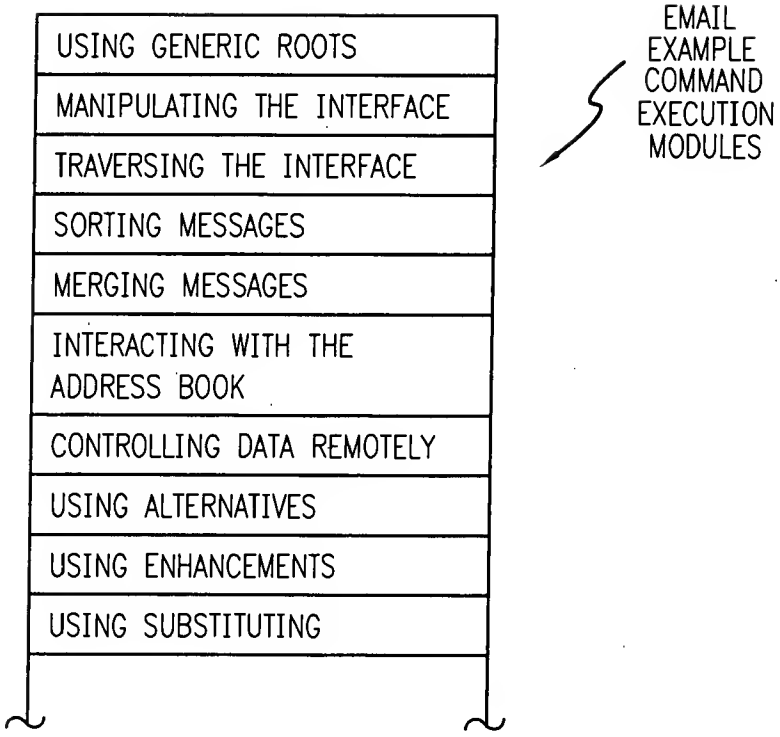
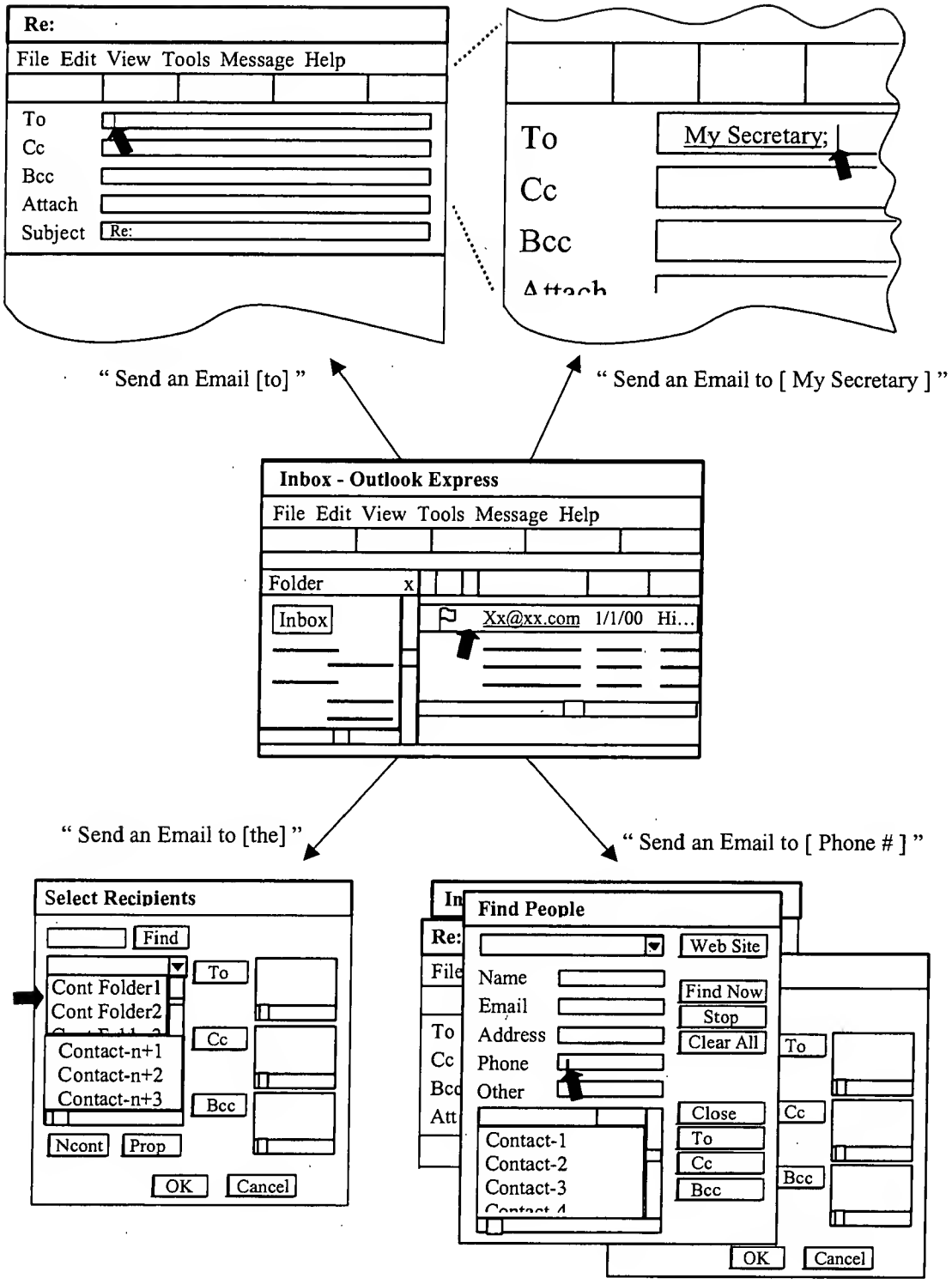

USING GENERIC ROOTS
MANIPULATING THE INTERFACE
TRAVERSING THE INTERFACE
SORTING MESSAGES
MERGING MESSAGES
INTERACTING WITH THE ADDRESS BOOK
CONTROLLING DATA REMOTELY
USING ALTERNATIVES
USING ENHANCEMENTS
USING SUBSTITUTING
EMAIL EXAMPLE COMMAND EXECUTION MODULES

FIG. 11A

FIG. 12


Re:
File Edit View Tools Message Help
To
Cc
Bcc
Attach
Subject
Re:
To
My Secretary;
Cc
Bcc
" Send an Email [to] "
" Send an Email to [My Secretary] "
Inbox - Outlook Express
File Edit View Tools Message Help
Folder
x
Inbox
Xx@xx.com 1/1/00 Hi...
" Send an Email to [the] "
" Send an Email to [Phone #] "
Select Recipients
Find
Cont Folder1
Cont Folder2
Contact-n+1
Contact-n+2
Contact-n+3
To
Cc
Bcc
Ncont
Prop
OK
Cancel
Find People
Web Site
Name
Email
Address
Phone
Other
Find Now
Stop
Clear All
Close
To
Cc
Bcc
Contact-1
Contact-2
Contact-3
OK
Cancel

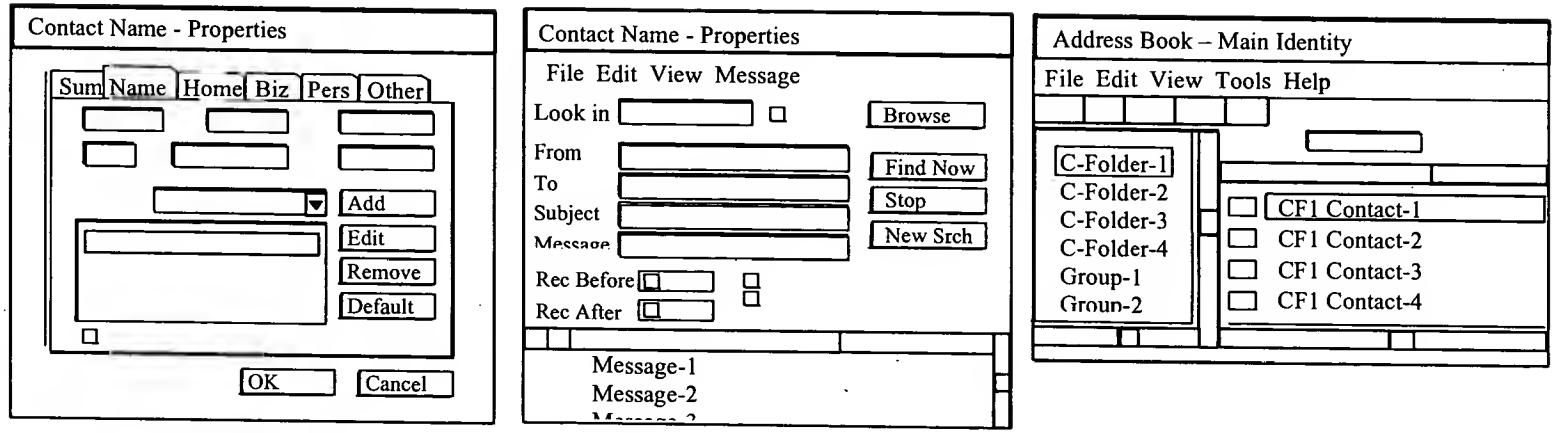

Contact Name - Properties
Sum
Name
Home
Biz
Pers
Other
Add
Edit
Remove
Default
OK
Cancel
Contact Name - Properties
File Edit View Message
Look in
Browse
From
To
Subject
Message
Find Now
Stop
New Srch
Rec Before
Rec After
Message-1
Message-2
Address Book – Main Identity
File Edit View Tools Help
C-Folder-1
C-Folder-2
C-Folder-3
C-Folder-4
Group-1
Groun-2
CF1 Contact-1
CF1 Contact-2
CF1 Contact-3
CF1 Contact-4

FIG. 13

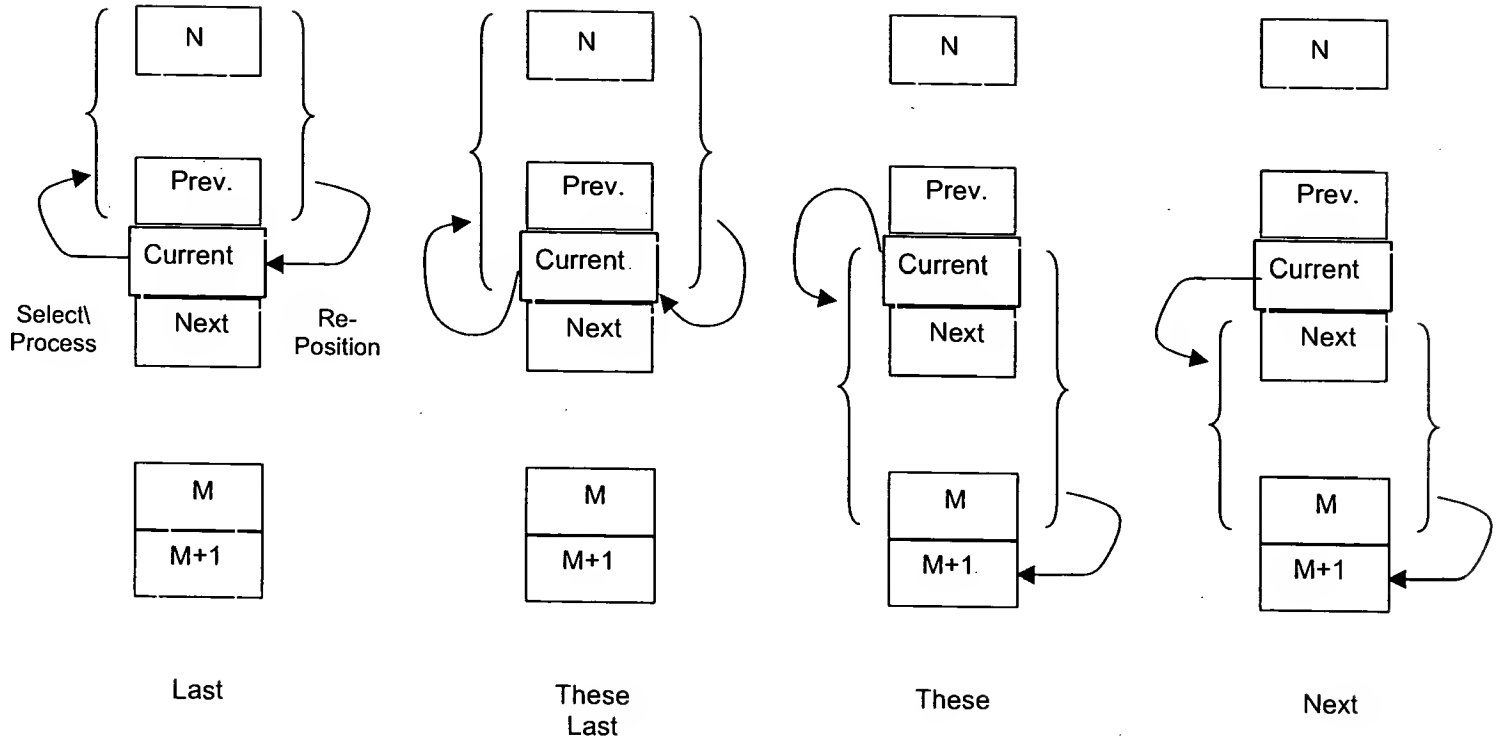

N
Prev.
Current
Next
Select\
Process
Re-
Position
M
M+1
Last
N
Prev.
Current
Next
M
M+1
These
Last
N
Prev.
Current
Next
M
M+1
These
N
Prev.
Current
Next
M
M+1
Next

FIG. 14

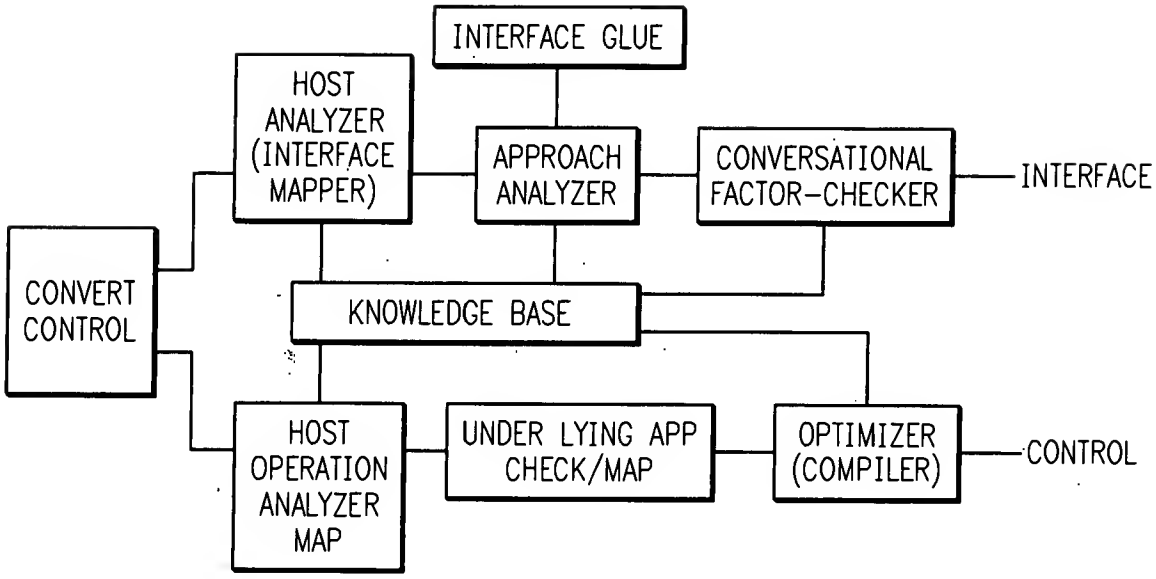


FIG. 19

NEW COMMAND/CONVERSION

FIG. 20

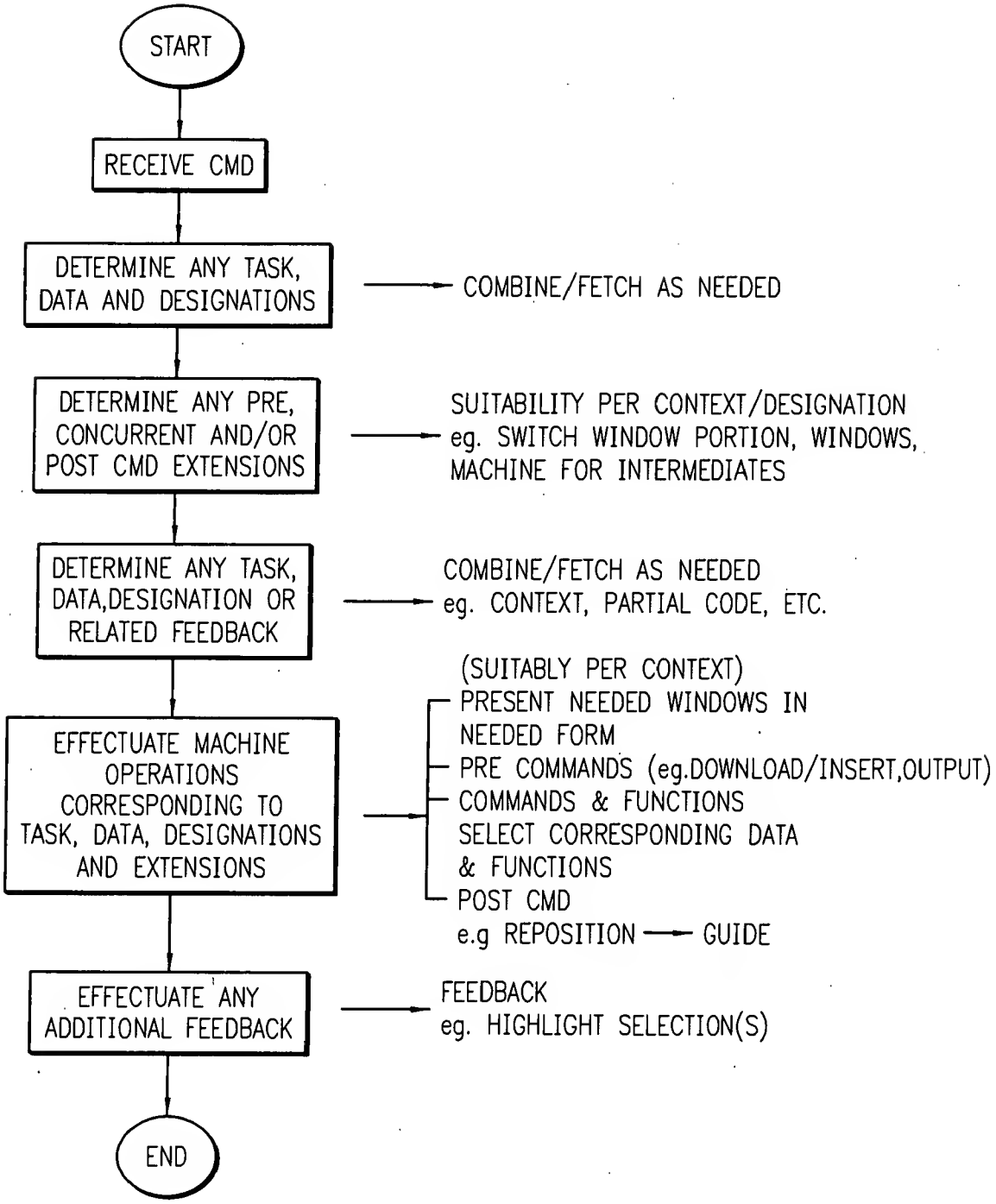
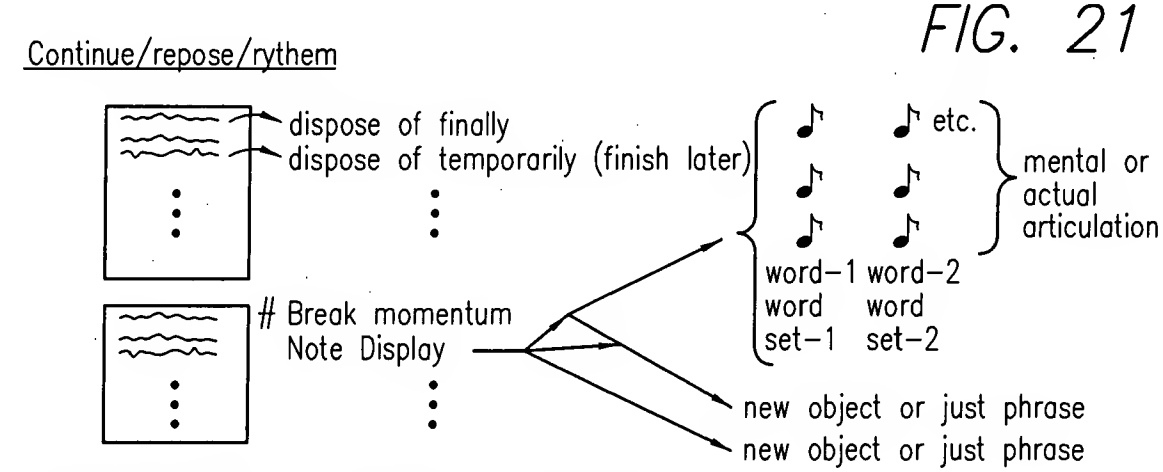
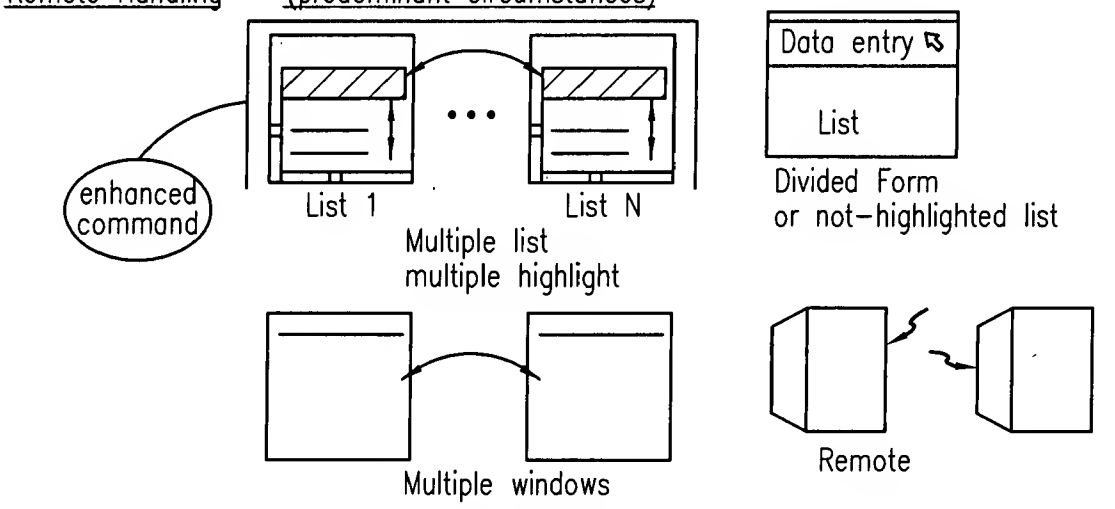
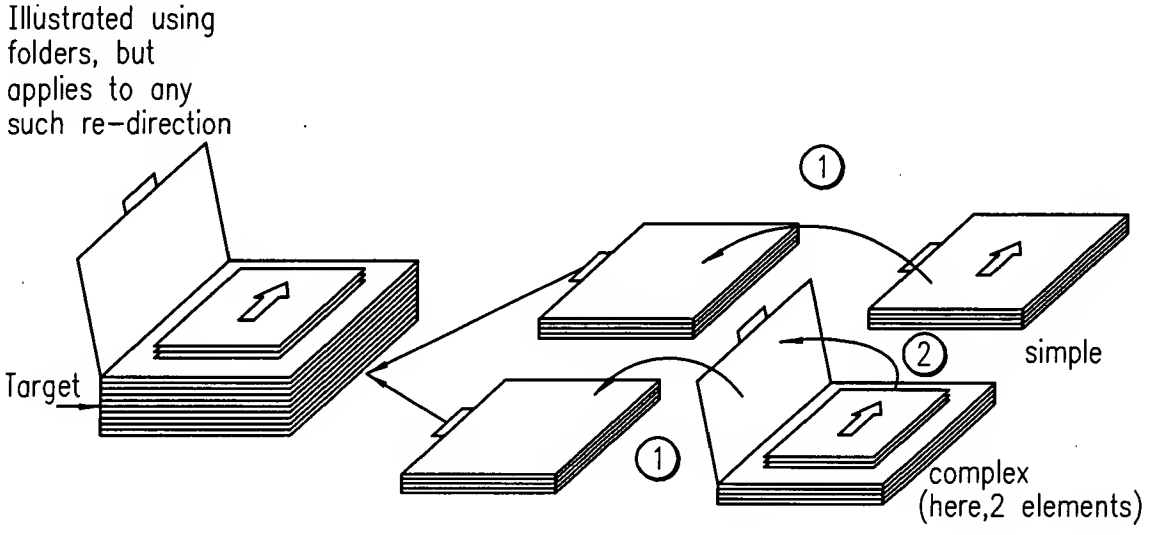

START
RECEIVE CMD
DETERMINE ANY TASK, DATA AND DESIGNATIONS
COMBINE/FETCH AS NEEDED
DETERMINE ANY PRE, CONCURRENT AND/OR POST CMD EXTENSIONS
SUITABILITY PER CONTEXT/DESIGNATION
eg. SWITCH WINDOW PORTION, WINDOWS, MACHINE FOR INTERMEDIATES
DETERMINE ANY TASK, DATA,DESIGNATION OR RELATED FEEDBACK
COMBINE/FETCH AS NEEDED
eg. CONTEXT, PARTIAL CODE, ETC.
EFFECTUATE MACHINE OPERATIONS CORRESPONDING TO TASK, DATA, DESIGNATIONS AND EXTENSIONS
(SUITABLY PER CONTEXT)
PRESENT NEEDED WINDOWS IN NEEDED FORM
PRE COMMANDS (eg.DOWNLOAD/INSERT,OUTPUT)
COMMANDS & FUNCTIONS
SELECT CORRESPONDING DATA & FUNCTIONS
POST CMD
e.g REPOSITION → GUIDE
EFFECTUATE ANY ADDITIONAL FEEDBACK
FEEDBACK
eg. HIGHLIGHT SELECTION(S)
END

FIG. 21







eg: (GOTO <foldername> Messages